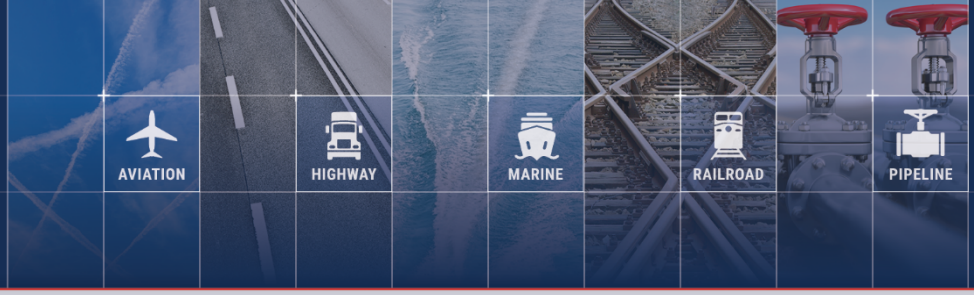

Aviation Investigation Final Report

Location:	Skwentna, Alaska	**Accident Number:**	ANC22LA080
Date & Time:	September 25, 2022, 13:00 Local	**Registration:**	N9728B
Aircraft:	Cessna 180A	**Aircraft Damage:**	Substantial
Defining Event:	Sys/Comp malf/fail (non-power)	**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was departing on a cross-country flight in a float-equipped airplane when the accident occurred. She had contacted a family member and stated she was departing; however, she did not arrive at the destination when expected. A search was initiated, and the airplane was located partially submerged in the departure lake.

Postaccident examination of the wreckage revealed that both floats were heavily corroded and separated from the fuselage. There was no evidence that either float had contacted a foreign object in the water. A portion of the hull on the right float tore open and bent back. It is likely that tear in the float resulted in the airplane impacting the water during the takeoff. Maintenance records were not available for review during the investigation.

Though toxicology testing of the pilot's tissue detected diazepam and venlafaxine and their metabolites in the pilot's system, it is unlikely that the effects of these medications contributed to this accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The failure of the landing gear float due to inadequate maintenance of the floats and corrosion.

Findings

Aircraft	Wheel/ski/float - Fatigue/wear/corrosion
Personnel issues	Scheduled/routine maintenance - Pilot

Factual Information

History of Flight

Takeoff	Sys/Comp malf/fail (non-power) (Defining event)
Takeoff	Dragged wing/rotor/float/other

On September 25, 2022, about 1300 Alaska daylight time, a float-equipped Cessna 180A airplane, N9728B, was substantially damaged when it was involved in an accident near Skwentna, Alaska. The pilot was fatally injured. The airplane was operated as a Title *14 Code of Federal Regulations* Part 91 personal flight.

According to a family member, the pilot sent a text message at 1240 indicating that she was ready to taxi for departure from Whiskey Lake so the family member would know when to expect her arrival. The intended route of flight was from Whiskey Lake to Lake Hood (PALH), Anchorage, Alaska. The family member estimated that it would take about 45 minutes to get from the departure point to the destination, and when the airplane was about 15 minutes overdue, he started calling around. A friend of the family flew over Whiskey Lake and found an airplane submerged in the water.

Members from the Alaska State Troopers (AST) Search and Rescue team located the airplane and pilot about 1630. Initial on scene photographs taken by AST indicated that the left float separated from the airplane, and it was subsequently located about 175 yards away from the main wreckage. The right float remained partially attached to the submerged airplane wreckage.

On October 4, 2022, members from the Alaska Dive Search Rescue and Recovery Team traveled to Whiskey Lake and recovered the submerged airplane, then moved it to the shoreline.

PERSONNEL INFORMATION

The pilot’s logbooks were not located.

AIRCRAFT INFORMATION

According to airworthiness records the floats were installed in June 1960. There were no maintenance records available for review.

WRECKAGE AND IMPACT INFORMATION

On October 6, 2022, the National Transportation Safety Board investigator-in-charge, along with representatives from Cessna Aircraft and the Federal Aviation Administration, traveled to the accident site. During the on-scene wreckage examination, flight control cable continuity was established from the control inputs to the control surfaces. The right wing was damaged from the tip of the wing inward; the wing tip was not located. The left wing remained submerged. The water rudder handle was in the UP position; the flaps were retracted. The propeller remained attached to the engine crankshaft flange. One blade was curled aft at the tip; the second blade was bent aft at midspan. Damage consistent with propeller strikes was noted on the inboard portion of the right float.

The bottoms of both floats were heavily corroded and discolored.

The right float remained attached to the airframe by the fly wire. There were six patches of varying size noted on the hull of the right float. A portion of the float hull, about midspan from the tip of the float to the step, was partially separated and bent aft. No evidence of impact with a foreign object was noted. (See Figure 1.)

Figure 1 View of partially separated section on hull of the right float.

The left float separated and was also recovered to the shore. Impact damage was noted on the front tip of the float. There was one patch on the hull of the left float, with another patch on top of it. The aircraft was equipped with EDO 249-2870 floats.

According to airworthiness records the floats were installed in June 1960. There were no maintenance records available for review.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy of the pilot was performed by the Alaska State Medical Examiner's Office, Anchorage, Alaska. The cause of death was blunt force injuries and subsequent drowning.

Toxicology testing performed by the Federal Aviation Administration's (FAA) Bioaeronautical Sciences Laboratory detected diazepam in the pilot's femoral blood at 12 ng/mL and the diazepam metabolite nordiazepam at 9 ng/mL in femoral blood. Venlafaxine and its metabolites were detected in femoral blood at 18ng/mL and 112 ng/mL, respectively. The high blood pressure medications metoprolol and timolol were detected in the pilot's liver tissue; metoprolol was also detected in her femoral blood, while the result for timolol in her femoral blood was inconclusive.

Diazepam, sometimes marketed as Valium, is a prescription benzodiazepine medication that can be used to treat a variety of conditions, including anxiety, muscle spasms, alcohol withdrawal, and seizures. Diazepam has sedative effects and can impair cognitive and psychomotor performance. The FAA considers an open prescription for diazepam disqualifying for medical certification and states that pilots using diazepam should not fly. Nordiazepam, oxazepam, and temazepam are active metabolites of diazepam.

Pilot Information

Certificate:	Private	**Age:**	68,Female
Airplane Rating(s):	Single-engine sea	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	3-point
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	BasicMed None	**Last FAA Medical Exam:**	May 28, 2020
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	(Estimated) 679 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N9728B
Model/Series:	180A	**Aircraft Category:**	Airplane
Year of Manufacture:	1957	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	50026
Landing Gear Type:	Float	**Seats:**	4
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	CONT MOTOR
ELT:	Installed	**Engine Model/Series:**	O-470 SERIES
Registered Owner:	On file	**Rated Power:**	230 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	AWS,354 ft msl	**Distance from Accident Site:**	58 Nautical Miles
Observation Time:	13:56 Local	**Direction from Accident Site:**	115°
Lowest Cloud Condition:		**Visibility**	10 miles
Lowest Ceiling:	Broken / 7500 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.85 inches Hg	**Temperature/Dew Point:**	12°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Skwentna, AK	**Type of Flight Plan Filed:**	None
Destination:	Anchorage, AK (LHD)	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Substantial
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Fatal	**Latitude, Longitude:**	61.991057,-151.40254(est)

Administrative Information

Investigator In Charge (IIC):	Hill, Millicent
Additional Participating Persons:	Kristian Gromada; FAA/FSDO; Anchorage, AK Jennifer Barclay; Textron; Wichita, KS
Original Publish Date:	February 28, 2024
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=105993

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties … and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available here.